

# Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



## 48120 Iron Oxide Red 120 M

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Revised edition: 14.02.2023

Version: 4.0

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### 1. Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1. Product Identifier

*Product Name:* Iron Oxide Red 120 M  
*Article No.:* 48120  
*UFI:* --

#### 1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

*Identified uses:*  
Coloring agent (pigment and dyes), inorganic.  
*Uses advised against:*

#### 1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

*Company:* Kremer Pigmente GmbH & Co. KG  
*Address:* Hauptstr. 41-47, 88317 Aichstetten, Germany  
*Tel./Fax.:* Tel +49 7565 914480, Fax +49 7565 1606  
*Internet:* www.kremer-pigmente.com  
*E-Mail:* info@kremer-pigmente.com  
*Importer:* --

#### 1.4. Emergency No.

*Emergency No.:* +49 7565 914480 (Mon-Fri 8:00 - 17:00)

#### 1.4.2 Poison Center:

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### 2. Hazards Identification

#### 2.1. Classification of the Substance or Mixture

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

*This product does not require classification and labelling as hazardous according to CLP/GHS.*

*Possible Environmental Effects:*

#### 2.2. Label Elements

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

*No classification required according to the CLP/GHS guidelines.*

*Hazard designation:*

*Not applicable.*

*Signal word:*

*Hazard designation:*

*Safety designation:*

*Hazardous components for labelling:*

#### 2.3. Other Hazards

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### 3. Composition/Information on Ingredients

Substance

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3.1.

3.2. Mixture

*Chemical Characterization:* Fe<sub>2</sub>O<sub>3</sub>. Pigment Red 101, C.I. 77491

*Information on Components / Hazardous Ingredients:*

Diiron trioxide (Fe <sub>2</sub> O <sub>3</sub> ); REACH Reg. No. 01-2119457614-35-0000	100 %	CAS-Nr: 1309-37-1 EINECS-Nr: 215-168-1 EC-Nr:
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*Additional information:*

*Diiron trioxide:*  
*Particle characteristics:*  
*Particle size distribution: d10 = 20 - 50 nm; d50 = 70 - 100 nm; d90 = 140 - 200 nm*  
*Form: Spheres; Specific surface area: 14 m<sup>2</sup>/cm<sup>3</sup> ± 6 m<sup>3</sup>/cm<sup>3</sup> (BET); Specific treatment: no*  
*This product/this mixture contains nanoforms.*

## 4. First Aid Measures

4.1. Description of the First Aid Measures

*General information:*

*Consult physician.*  
*Do not leave affected persons unattended.*  
*Take person away from hazardous area.*  
*First aiders: mind self-protection!*

*After inhalation:*

*Supply fresh air and keep patient calm.*  
*If breathing is difficult call a physician.*  
*Keep the airways open. Unfasten tight garments (collar, tie, belt).*

*After skin contact:*

*Remove contaminated clothing and wash before reuse.*  
*Wash off with plenty of water.*  
*Continue to rinse for at least 10 minutes.*  
*If symptoms persist, consult a physician.*

*After eye contact:*

*Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.*

*After ingestion:*

*Rinse mouth with water. Consult a physician in case of complaints.*  
*Do not induce vomiting unless directed to do so by medical personnel.*  
*In case of unconsciousness, store, respectively transport in stable side position.*  
*Immediately get medical help.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*No further information available.*

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*Effects:*

**4. 3. Indication of any Immediate Medical Attention and special Treatment needed**

*Treatment:*

*Treat symptomatically.*

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**5. Fire-Fighting Measures**

**5. 1. Extinguishing Media**

*Suitable extinguishing media:*

*Water mist, extinguishing powder, foam, carbon dioxide.*

*Unsuitable extinguishing media:*

*None known.*

**5. 2. Special Hazards arising from the Substance or Mixture**

*Special hazards:*

*No special hazards.*

*Product is not flammable.*

**5. 3. Advice for Firefighters**

*Protective equipment:*

*Usual measures for chemical fires.*

*Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.*

*Further information:*

*Prevent fire extinguishing water from contaminating surface water or the ground water system.*

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**6. Accidental Release Measures**

**6. 1. Personal Precautions, Protective Equipment and Emergency Procedures**

*Personal precautions:*

*Avoid formation of dust, wear protective clothing. Keep spectators away.*

*Ensure adequate ventilation.*

**6. 2. Environmental Precautions**

*Environmental precautions:*

*Prevent contamination of soils, drains and surface water.*

*In case of Contact local authorities if product pollutes soil or vegetation.*

**6. 3. Methods and Material for Containment and Cleaning Up**

*Methods and material:*

*Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.*

**6. 4. Reference to other Sections**

*Protective clothing, see Section 8.*

*Dispose of contaminated material according to Section 13.*

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**7. Handling and Storage**

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### 7.1. Precautions for Safe Handling

*Instructions on safe handling:*

*Wear adequate protective clothing (see para. 8).  
Avoid contact with eyes and skin.  
Provide good ventilation and/or exhaust at the workplace. Ensure adequate ventilation. Handle and open container with care.*

*Hygienic measures:*

*Do not eat or drink during work. Do not smoke.*

### 7.2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Store in tightly sealed containers in a dry and well ventilated location.*

*Protect product from direct sunlight.*

*Requirements for storage areas and containers:*

*Preferably store in the original container  
Keep containers upright and protect from damage.  
Close open containers with care and store in an upright position to avoid spilling.*

*Information on fire and explosion protection:*

*Electrical installations / working materials must comply with the technological safety standards.*

*Storage class:*

*13; Non combustible solids (TRGS 510)*

*Further Information:*

### 7.3. Specific End Use(s)

*Further information:*

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## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*Does not contain any components with workplace limit values.*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*No values available.*

*Predicted No-Effect Concentration (PNEC):*

*No values available.*

*Additional Information:*

### 8.2. Exposure Controls

*Technical protective measures:*

*Provide adequate ventilation.  
Provide adequate ventilation/exhaust system.*

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### *Personal Protection*

#### *General protective measures:*

*Remove contaminated clothing. Wash hands after work.  
Wash contaminated clothes before reuse.  
Keep away from foodstuffs, beverages and feed.*

#### *Respiratory protection:*

*Dust mask recommended when very dusty (with particle filter P1).*

#### *Hand protection:*

*Protective gloves*

#### *Protective glove material:*

*Leather gloves (< 60 min)*

#### *Eye protection:*

*Safety glasses with protective shields (EN 166).*

#### *Body protection:*

*Protective clothing.*

#### *Environmental precautions:*

*Avoid contamination of sewage system, open water ways and ground water.*

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## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>red</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>5 - 8 (10 % w/w)</i>
<i>Melting temperature:</i>	<i>&gt; 1000°C (&gt; 1832°F)</i>
<i>Boiling temperature:</i>	<i>not applicable</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>not available</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	

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*not applicable*

*Vapor density:*

*This product is a non-volatile solid.*

*Density:*

*5 kg/l (20°C)*

*Solubility in water:*

*insoluble*

*Coefficient of variation (n-Octanol/Water):*

*no information available*

*Auto-ignition temperature:*

*not applicable*

*Decomposition temperature:*

*not determined*

*Viscosity, dynamic:*

*not applicable*

*Explosive properties:*

*not applicable*

*Oxidizing properties:*

*no information available*

*Bulk density:*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Partikel characteristics: This substance/ mixture contains nanoforms (see Section 3).*

*Other information:*

*No further information.*

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## 10. Stability and Reactivity

### 10.1. Reactivity

*No information available.*

### 10.2. Chemical Stability

*The product is stable.*

### 10.3. Possibility of Hazardous Reactions

*None if handled and stored according to specifications.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*No information available.*

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*Thermal decomposition:*

**10.5. Incompatible Materials**

*No information available.*

**10.6. Hazardous Decomposition Products**

*None if stored and handled according to specifications.*

**10.7. Further Information**

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**11. Toxicological Information**

**11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008**

*Acute Toxicity*

*LD50, oral: > 5000 mg/kg (rat)*

*LD50, dermal:*

*No information available.*

*LC50, inhalation:*

*No information available.*

*Primary effects*

*Irritant effect on skin:*

*Non irritating*

*Irritant effect on eyes:*

*Non-irritating to eyes*

*Inhalation:*

*No irritant effect known.*

*Ingestion:*

*No information available*

*Sensitization:*

*Non sensitizing.*

*Mutagenicity:*

*No relevant data found.*

*Reproductive toxicity:*

*No relevant data found.*

*Carcinogenicity:*

*No relevant data found.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*Single exposure: Not classified based on available information.*

*Repeated exposure: Not classified based on available information.*

*Aspiration hazard:*

*No information available.*

**11.2. Information on other Hazards**

*Endocrine Disrupting Properties:*

*This substance/mixture does not contain any components with*

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*endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.*

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### 12. Ecological Information

#### 12.1. Aquatic Toxicity

*Fish toxicity:*

*LC50: > 1000 mg/l (48h, Leuciscus idus; OECD 203)*

*Daphnia toxicity:*

*EC50: > 10000 mg/l (48h, Daphnia magna)*

*Bacteria toxicity:*

*No data available.*

*Algae toxicity:*

*No information available.*

#### 12.2. Persistency and Degradability

*No information available.*

#### 12.3. Bioaccumulation

*No information available.*

#### 12.4. Mobility

*No information available.*

#### 12.5. Results of PBT- und vPvP Assessment

*On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.*

#### 12.6. Endocrine Disrupting Properties

*This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delgated Regulation (EU) No. 2017/2100 or Commission Regulaton (EU) 2018/605 at levels of 0.1 % or higher.*

#### 12.7. Other Adverse Effects

*Water hazard class:*

*Not hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*No special effects or hazards known.*

*AOX Value:*

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### 13. Disposal Considerations

#### 13.1. Waste Treatment Methods

*Product:*

*If product cannot be reused or recycled, it has to be disposed of according to current local regulations.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

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*Non contaminated packaging can either be recycled or utilized for energy (incineration).*

*Waste Code No.:*

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### 14. Transport Information

#### 14.1. UN Number

*ADR, IMDG, IATA*

#### 14.2. UN Proper Shipping Name

*ADR/RID:*

*No hazardous goods according to ADR / DOT (US) (land transportation).*

*IMDG/IATA:*

*Not hazardous goods*

#### 14.3. Transport Hazard Classes

*ADR Class:*

*not applicable*

*Hazard no.:*

*Classification code:*

*Tunnel restriction code:*

*IMDG Class (sea):*

*not applicable*

*Hazard no.:*

*EmS No.:*

*IATA Class:*

*not applicable*

*Hazard no.:*

#### 14.4. Packaging Group

*ADR/RID:*

*not applicable*

*IMDG:*

*IATA:*

#### 14.5. Environmental Hazards

*None*

#### 14.6. Special Precautions for User

*Not classified as a dangerous good under transport regulations.*

#### 14.7. Maritime Transport in Bulk according to IMO Instruments

*not applicable*

#### 14.8. Further Information

*Do not store together with foodstuffs.  
Protect against moisture.*

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### 15. Regulatory Information

#### 15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

*Water hazard class:*

*0, not hazardous (German Regulation, Assessment by list)*

*Local regulations on chemical accidents:*

*Seveso III Directive: not applicable under Directive 2012/18/EC.*

*Employment restrictions:*

*Restriction and prohibition of application:*

*EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable*

*Technical instructions on air quality:*

#### 15.2. Chemical Safety Assessment

*A Chemical Safety Assessment is not necessary for this product.*

#### 15.3. Further Information

*Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable*

*Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable*

*Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted*

*Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable*

*International Chemical Weapons Convention (CWC), list of the toxic chemicals and toxic chemical precursors: not forbidden and/or restricted*

*EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable*

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### 16. Other Information

*This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.*